

clinical course of DVT may also be complicated by recurrent episodes of DVT, the development of post-thrombotic syndrome (PTS), as well as chronic thromboembolic pulmonary hypertension (CTEPH). The aim of study was to estimate the cost of VTE treatment in Turkey. **METHODS:** The study was undertaken from the Turkish health care payer perspective. (SSI). An Excel sheet was formed to determine the healthcare resources used in treatment of VTE. VTE treatment costs were divided by anticoagulant use, monitoring INR, recurrent DVT, recurrent PE, non IC major bleeding (GIS), Intracranial bleed, CTEPH and PTS long term costs. Resource utilization data were obtained via expert clinical views and included diagnosis costs and treatment costs. Unit costs were taken from the Social Security Institution's Health Implementation Guideline. **RESULTS:** According to the results of the study, cost of anticoagulants were 146,59 TL, monitoring INR costs were 90,00 TL, recurrent DVT costs were 1,972,41 TL, recurrent PE costs were 830,49 TL, non IC major bleeding (GIS) costs were 1,482,49, Intracranial bleed costs were 3,868,86 TL, CTEPH costs were 22,228,12 TL and PTS long term costs were 754,29 TL in Turkey. **CONCLUSIONS:** The study showed that VTE treatment poses a high treatment cost due to recurrence and OAC complications in the Turkish health care system.

PCV88

ECONOMIC BURDEN OF ACUTE MYOCARDIAL INFARCTION IN VIETNAM

Nguyen TP¹, Nguyen T², Postma M³

¹Groningen University, Groningen, The Netherlands, ²Thai Nguyen General Hospital, Thai Nguyen, The Netherlands, ³University of Groningen, Groningen, The Netherlands

OBJECTIVES: Vietnam spends 6% of its GDP to health care. In context of insufficient evidence on quantifying the economic burden of cardiovascular disease in Vietnam, we conducted a study on the costs of Acute Myocardial Infarction (AMI). Costs were identified from the perspective of the health care payers, including health insurance providers and patients. **METHODS:** Data was extracted from the database of a regional hospital in Vietnam. All patients with the single code I21 according to the International Classification of Disease 10 were included in the study. Costs were calculated in year 2013. Out-of-pocket payment was quantified as the net of health insurance (HI) reimbursement and actual payments. **RESULTS:** 89 patient-hospitalizations were included in the study, including 34 cases requiring percutaneous coronary intervention and 55 cases requiring medicine only. Mean costs of AMI were US\$ 2,503 (+/- 3,377) per hospitalization. Costs per hospitalization were higher in the group requiring percutaneous coronary intervention than in the group requiring medicine only at US\$5,962 (+/- 3,197) and US\$365 (+/- 401), respectively. Out-of-pocket payments were approximately 60% of these costs. Generally, cost of AMI per hospitalization in Vietnam was higher than GDP per capita (US\$ 1,900). **CONCLUSIONS:** Our results indicate that MI prevention is needed to reduce the burden of disease as well as to avoid catastrophic expenditure and impoverishment problems in Vietnam. Our results also comprise essential building blocks for important variables in a future cost-effectiveness modeling exercise on cardiovascular prevention.

PCV89

A COMPARISON OF TWO LOW-MOLECULAR-WEIGHT HEPARINS (LMWHs) IN TERMS OF COST PER PATIENT

Planellas L¹, Miñarro C², Restovic G¹, Delgado M³, Rubio M³

¹IMS Health, Barcelona, Spain, ²IMS Health, Madrid, Spain, ³Sanofi, Barcelona, Spain

OBJECTIVES: To compare the total treatment duration cost per patient between the two most used low-molecular-weight heparins (LMWHs) in Spain for the prophylaxis of the venous thromboembolism disease (VTE) and the treatment of deep vein thrombosis (DVT) with and without pulmonary embolism (EP), during the acute phase and at long term. **METHODS:** patients in prophylaxis were classified as moderate or high according to the risk of the surgery. Patients with high risk were further classified by surgery type: 1) orthopedic or oncologic surgery, 2) other surgeries, and 3) medical patients (surgery is not performed by a surgical specialty but other specialists). Patients with DVT were divided into 10 kilogramme weight ranges as well as considering the distribution of the Spanish population in each range taken from the RIETE registry. Treatment duration was obtained from clinical guidelines. Treatment duration and patient profile defined the strength and package size used to estimate the cost per patient in prophylaxis. Concerning DVT, only the most appropriate strengths for each weight range were considered. Costs are expressed in € of 2015 and calculated based on the retail price plus the value-added tax of each LMWH discounting the corresponding deduction according to Royal Decrees. **RESULTS:** administering enoxaparin instead of bempaparin represents a saving of 6€ (5%), 7€ (16%) and 7€ (16%) per patient per total treatment duration with high risk undergoing surgery type 1, 2 and 3, respectively, and 4€ (16%) per patient per total treatment duration with moderate risk. Average savings per patient per total treatment duration with DVT came to 61€ (56%) and 354€ (46%) in the acute phase and at long term, respectively. **CONCLUSIONS:** the cost of treating VTE or DVT is lower when administering enoxaparin instead of bempaparin. Therefore, the use of enoxaparin represents an economic benefit for the Spanish health system.

PCV90

THE COST OF ACUTE CARE HOSPITALIZATIONS ASSOCIATED WITH CHRONIC HEART FAILURE IN CANADA

Fischer AA¹, Liu N¹, Borelli R¹, Barbeau M², Zaour N²

¹IMS Brogan, Mississauga, ON, Canada, ²Novartis Pharmaceuticals Canada Inc., Dorval, QC, Canada

OBJECTIVES: Chronic heart failure (CHF) affects more than 600,000 Canadians, resulting in thousands of hospitalizations and deaths each year. This study's objective is to compare the mean cost (\$CAD) of a CHF, cardiovascular, and non-cardiovascular diagnosed hospitalization amongst acute care treated CHF diagnosed patients. This study builds upon previously presented Canadian CHF hospitalization costing research. **METHODS:** Hospital discharge abstracts recorded between 2009 and 2013 were extracted from the Canadian Institute for Health Information's

Discharge Abstract Database and National Ambulatory Care Reporting System database. All acute care hospitalization discharge abstracts with either congestive heart failure (ICD-10 code I50.0) recorded as the most responsible diagnosis (MRDx) or contributing diagnosis amongst patients aged ≥18 were included in the study. Abstracts with a CHF MRDx were categorized in the CHF group. The remaining abstracts were categorized into either the cardiovascular group (circulatory system disease MRDx (ICD-10 I00 – I99), excluding CHF) or non-cardiovascular group (non-circulatory system disease MRDx). Discharge abstracts with missing demographics, or absent without leave or against medical advice discharge status were excluded. **RESULTS:** 156,847; 66,056; and 127,847 CHF, cardiovascular, and non-cardiovascular group discharge abstracts were included, respectively, of which 10%, 13% and 21% of the respective group abstracts resulted in death. The national mean hospitalization visit cost was \$10,123; \$20,890; and \$21,283 for the CHF, cardiovascular, and non-cardiovascular groups respectively. For each CHF, cardiovascular, and non-cardiovascular group, a survival outcome incurred a lower national mean hospitalization visit cost at \$9,222; \$19,899; and \$19,036 whereas a death outcome incurred a high national mean hospitalization visit cost at \$18,087; \$27,642; and \$29,887, respectively. **CONCLUSIONS:** Cardiovascular and non-cardiovascular hospitalizations result in higher mean hospitalization costs than those with a CHF MRDx. An opportunity exists for interventions reducing the number of any CHF related hospitalization to ease the burden on healthcare.

PCV91

AN EPIDEMIOLOGICAL EVALUATION OF THE IMPACT OF PERCUTANEOUS CORONARY INTERVENTIONS ON THE HOSPITALIZATION COST, LENGTH OF STAY AND MORTALITY OF PATIENTS HOSPITALIZED WITH ACUTE CORONARY SYNDROMES

Chevalier P, Lamotte M

IMS Health, Vilvoorde, Belgium

OBJECTIVES: Randomized clinical trials comparing percutaneous coronary interventions (PCI) and non-invasive treatment of acute coronary syndromes mostly favour the invasive approach. This study aimed at assessing whether in a real life setting PCI has an impact on outcomes as hospitalization cost, length of stay (LOS) and mortality in patients hospitalized for acute coronary syndromes (ACS) in Belgium. **METHODS:** The hospitalization cost, average length of stay (LOS) and mortality among hospitalized patients with ACS were estimated using the longitudinal IMS Hospital Disease Database (year 2013), including data on about 24% of Belgian hospital beds. Stays were identified based on ICD-9 coding and split in ST-elevated Myocardial infarction (STEMI ICD-9: 410 excluding 410.7), non-STEMI (NSTEMI: ICD-9: 410.7-411.89) and unstable angina (UA; ICD-9: 411.1-411.8-413.0). PCIs were identified with ICD-9 code 36.0. Comparisons were performed using a Wilcoxon non-parametrical test for cost/LOS and a Chi-square for mortality. **RESULTS:** 2,528 STEMI, 2,815 NSTEMI and 407 UA hospitalizations were retrieved from the database, with respectively 1,457, 1,194 and 30 of them treated invasively. PCI resulted in higher costs in STEMI (€9,342 vs. €8,165; p<0.001) and UA (€9,186 vs. €4,714; p<0.001) and in lower costs in NSTEMI (€8,483 vs. €9,483; p<0.001). LOS of patients undergoing PCI was significantly lower in STEMI (6.2 vs. 9.7 days; p<0.001) and NSTEMI (5.6 vs. 10.9; p<0.001). In-hospital mortality in patients with PCI was lower in both STEMI (6.2% vs. 21.4%; p<0.001) and NSTEMI (1.6% vs. 8.0%; p<0.001). LOS (5.5 vs. 5.9 days) and mortality (0.0% vs. 3.2%) were not significantly different in UA. **CONCLUSIONS:** Although information on the baseline characteristics of the different patients is limited, the findings of this retrospective study seem to support randomized clinical trials. Treatment with PCI significantly decreases the LOS and the mortality in patients with a myocardial infarction, at a limited marginal cost.

PCV92

COST-BENEFIT ANALYSIS OF YINDANXINTAI DROPPING PILLS IN THE TREATMENT OF ANGINA PECTORIS CAUSED BY CORONARY HEART DISEASE

Wu H, Shi Q

Guizhou Medical University, Guiyang, China

OBJECTIVES: To evaluate the costs and benefits of Yindanxintai dropping pills (Guizhou Junzhitang Pharmaceutical Company) for angina pectoris caused by coronary heart disease from the societal perspective. **METHODS:** The comparator was chosen from published literature. Treatment results and costs were derived from published literature and government websites. A contingent valuation survey was used to elicit the respondents' willingness-to-pay (WTP) for angina pectoris treatments. The WTP was modeled as a function of the treatment outcomes, design of questionnaire scenarios, individual health states and characteristics. A total of 351 questionnaires were completed. The primary outcome was the annual net cost-benefit or incremental net cost-benefit per person tested. **RESULTS:** WTP increased with the growth of effective rate. The average WTP was given 377 RMB per month (range 100 RMB to 2000 RMB) to the treatment with a 95% effective rate. There were 7 papers that provided adequate information to the further cost-benefit analysis (CBA). Results from the CBA indicated that Yindanxintai dropping pills had a positive annual net benefit when used alone, and the treatment with 56 days was superior to 28 days with an annual incremental net benefit (AINB) of 4529 RMB per person tested. Yindanxintai dropping pills used with nitroglycerin tablets (Shanghai Sina Pharmaceutical Company) had greater net benefit than simvastatin tablets (Yangtze River Pharmaceutical Group) with nitroglycerin tablets (AINB=1471 RMB). Yindanxintai dropping pills used with isosorbide mononitrate sustained release tablets (AstraZeneca AB), Xinkang tablets (Lunan Pharmaceutical Company), or Xinkang tablets and Xinke tablets (Guangzhou Nanxin Pharmaceutical Company) also had greater net benefit than the other drugs used alone (AINB were 306 RMB, 479 RMB, 1067 RMB, respectively). The results of this research were proved robust through sensitivity analyses. **CONCLUSIONS:** Yindanxintai dropping pills is cost-beneficial in the treatment of angina pectoris caused by coronary heart disease either used alone or used with other drugs.